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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,382	06/26/2003	Gab Jae Lee	2950-0269P	4732
2292	7590	10/23/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PHAM, VAN T	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,382

Applicant(s)

LEE, GAB JAE

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13 is/are rejected.
- 7) ☒ Claim(s) 9-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/16/2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 7/20/2006 has been fully considered are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-¹³₈ are rejected under 35 U.S.C. 102(e) as being anticipated by Takauji et al. (US 6,292, 284).

Regarding claim 1, Takauji discloses a method for controlling an optical power level, comprising the steps of: a) increasing a control value of a driving signal generator for driving a pickup unit to output an optical power until the driving signal generator starts generate a driving voltage; and b) setting the increased control value at which the driving signal generator starts to

generate the driving voltage as an offset value for setting up an optical power of the pickup unit (see Figs. 5, 8-10, and see cols. 6, 10-11).

Regarding claim 2, see Figs. 5 (elements 10), Fig. 6, discloses the method as set forth in claim 1, wherein the driving signal of the driving signal generator is applied to a laser diode of the pickup unit, and a magnitude of the optical power is determined by a level of the driving signal.

Regarding claim 3, see Figs. 5, and cols. 5, 10, discloses the method as set forth in claim 1, wherein the offset value is stored in a nonvolatile memory.

Regarding claim 4, see Figs. 5-6 and 8-10, discloses the method as set forth in claim 1, wherein the offset value is determined when an optical disc apparatus is initially driven (inherently).

Regarding claim 5, discloses the method as set forth in claim 1, wherein the step (b) includes the steps of: b1) determining the control value at which the driving voltage of the driving signal generator reaches a predetermined voltage level (see col. 22-23); and b2) subtracting a predetermined value from the determined control value, and setting the subtracted result value as the offset value (see Figs. 5, 11, 20).

Regarding claim 6, discloses the method as set forth in claim 5, wherein the predetermined voltage level is within a threshold area of the driving voltage of the driving signal generator (see col. 22).

Regarding claim 7, see Figs. 8-9 and cols. 22-23, discloses the method as set forth in claim 1, further comprising the step of: c) calculating a control value for generating the desired optical power of the pickup unit based on the offset value.

Regarding claim 8, see Fig. 5 and cols: 22-23, discloses the method as set forth in claim 7, wherein the step (c) includes the steps of: c1) applying a predetermined control value and measuring a corresponding optical power of the pickup unit (inherent); and c2) calculating a control value for generating the desired optical power based on the predetermined control value, the measured optical power corresponding to the predetermined control value, and the offset value (see cols. 22-23 and Figs. 8-9).

Regarding claim 13, see rejection of claim 1 and 8 and see Figs. 5, 11 and 20.

Allowable Subject Matter

5. Claims 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is allowable over prior art of record since it does not disclose or suggest all the limitations of claims 1, 7-8 as well as the limitation that the the control value for generating the specific driving signal level in the step (d2) is calculated by the following equation: $4 \text{ DAC DSL} = \text{DAC offset} + \text{DSL DSL 1} \cdot \text{times. (DAC 1 - DAC offset)}$, where DSL is a driving signal level of the driving signal generator applied to the laser diode, DAC.sub.DSL is a control value for

generating a value of DSL, DAC.sub.offset is an offset value, a DAC.sub.1 is a predetermined control value, and a DSL.sub.1 is a driving signal level in response to a value of DAC.sub.1.

Claim 10 is allowable over prior art of record since it does not disclose or suggest all the limitations of claims 1, 7 as well as the limitation that the control value for generating the desired optical power is previously stored in a nonvolatile memory in the form of a difference between the control value and an offset value for setting up an the desired optical power.

Claims 11-12 are allowed with their parent claim 10.

Cited References

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. A light emission adjustment-processing unit of a laser diode sequentially instructs a D/A converter for light emission of a light emission by test powers at two predetermined two points (Masaki US 5,732,055).
 - b. The cited references relate to pickup control method and apparatus, and disk unit with gain control during power save mode (Ikeda US 5,715,218).
 - c. Calibration of the write signal power level applied to a transducer for making a moving media (Call et al. US 5,268,893).
 - d. Light emitting element-driving apparatus (Takauji et al. US 6,292,284).
 - e. Optical transmission circuit using a semiconductor laser (Ikeuchi et al. US 6,95,656)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Pham whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am – 600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER